SYNOPSIS

ON

A STUDY ON THE EFFECTIVENESS OF COMMUNITY-BASED MANAGEMENT OF MODERATE ACUTE MALNUTRITION IN CHILDREN (WITH SPECIAL REFERENCE TO GUMLA BLOCK)

For
Registration in Ph.D.
Programme

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- **State-of-the-art:-**

Malnutrition refers to deficiencies or excessive nutrient intake, imbalance of essential nutrients or impaired nutrient utilisation. The double burden of malnutrition consists of both undernutrition and overweight and obesity as well as diet related non communicable diseases. under nutrition manifest in four broad forms wasting, stunting, underweight and micronutrient deficiencies.

The currently accepted definitions set out by the WHO are as follows.

moderate acute malnutrition (MAM)defined as weight-for-height Z-score (WFH)between -2 and - 3 or mid upper arm circumference (MUAC)between 115 millimetres and 125 millimetres.

According to NFHS-5 Ministry of Health and Family Welfare children under 5 years who are wasted (weight-for-height) in percentage are 22.4 in Jharkhand.

Malnutrition results from a combination of three key factors inadequate food intake, illness and deleterious caring practices underline these are household food insecurity, inadequate employment and incomes, seasonal migration, specially among tribal populations relatively high food prices, geographic and seasonal maldistribution of food, poor social organisation and large family size.

The management of moderate acute malnutrition can be broadly categorized into prevention and treatment strategies. In general, because wasting results in a loss of body mass relative to height, the standard practice has been to provide the child with additional energy and nutrient dense foods to promote weight gain. The selection of the particular management approach is context specific different approaches are warranted for populations that are more stable and food secure than for populations experiencing significant food insecurity or humanitarian emergencies.

Moderate acute malnutrition (MAM) is more prevalent than severe acute malnutrition (SAM) and affects approximately 64% of all those categorised as having acute malnutrition. Children with MAM do not yet display the same degree of wasting and other clinical complications as those with SAM, although the causes are thought to be similar. However, patients with MAM are also in a highly vulnerable state and need to be treated before their condition progresses to SAM. Compared to well-nourished children, children with MAM have a three-fold increased risk of mortality, increased risk of infections and impaired physical and cognitive

development. patients with MAM are also in a highly vulnerable state and need to be treated before their condition progresses to SAM.

Compared to well-nourished children, children with MAM have a three-fold increased risk of mortality, increased risk of infections and impaired physical and cognitive development. MAM require food of sufficient energy and nutrient density to recover.

The Ministry of Women and Child Development in India has been running the Integrated Child Development Services (ICDS) since 1975 to address child malnutrition. ICDS tracks the underweight or weight-for-age status of children up to 6 years of age through a network of informal preschools called Anganwadi centres. Each centre is staffed with a community-based worker and helper who provide nutritional supplementation to children and pregnant women, basic informal education to children, and health education to mothers. While there are currently around 1.3 million Anganwadi centres functioning across local communities in India.

The Government has taken several initiatives to break the intergenerational cycle of malnutrition. Adopting a life-cycle approach, interventions have been designed to meet the nutritional requirements of adolescent girls, pregnant women, lactating mothers and children through several schemes like POSHAN Abhiyaan, Anganwadi Services, Scheme for Adolescent Girls and Pradhan Mantri Matru Vandana Yojana (PMMVY) as direct targeted interventions to address the problem of malnutrition in the country.

POSHAN Abhiyaan was launched on 8th March 2018, with an aim to achieve improvement in nutritional status of Adolescent Girls, Pregnant Women and Lactating Mothers in a time bound manner by adopting a synergised and result oriented approach. Further, the efforts under the Supplementary Nutrition Programme under Anganwadi Services and POSHAN Abhiyaan were rejuvenated and converged as 'Saksham Anganwadi and POSHAN 2.0' (Mission Poshan 2.0) to address the challenges of malnutrition in children, adolescent girls, pregnant women and lactating mothers through a strategic shift in nutrition content and delivery and by creation of a convergent ecosystem to develop and promote practices that nurture health, wellness and immunity.

Poshan 2.0 focuses on Maternal Nutrition, Infant and Young Child Feeding Norms, Treatment of MAM/SAM and Wellness through AYUSH. It rests on the pillars of Convergence, Governance, and Capacity-building. POSHAN Abhiyaan is the key pillar for Outreach and will cover innovations related to nutritional support, ICT interventions, Media Advocacy and Research, Community Outreach and Jan Andolan.

Under Poshan 2.0, focus is on diet diversity, food fortification, leveraging traditional systems of knowledge and popularizing use of millets. Nutrition awareness strategies under Poshan 2.0 aim to develop sustainable health and well-being through regional meal plans to bridge dietary gaps. Further, greater emphasis is being given on the use of millets for preparation of Hot Cooked Meal and Take Home rations at Anganwadi centres for Pregnant Women, Lactating Mothers and Children below 6 years of age, as millets have high nutrient content which includes protein, essential fatty acid, dietary fibre, B-Vitamins, minerals such as calcium, iron, zinc, folic acid and other micro-nutrients thus helping to tackle anaemia and other micro-nutrient deficiencies in women and children. As per the Scheme Guidelines issued for Mission Saksham Anganwadi & Poshan 2.0, millets need to be mandatorily supplied at least once a week and suitably integrated in Take Home Ration and Hot Cooked Meal in a palatable form.
Another key plank of the Abhiyaan are the Poshan Vatikas or Nutri-gardens that are being set up across the country to provide easy and affordable access to fruits, vegetables, medicinal plants and herbs.

Matthew Jukes (2006) carried out the studies on Impact of early childhood health and nutrition on access to education in developing countries and found that concerns about paediatric ailment in developing countries need to make bigger a ways beyond issues of survival. There are limitless methods in which poor health and nutrition in the early years can influence a child's possibilities of attending school however a few of these situations are preventable or treatable. A life cycle method wishes to be taken to address those situations starting with maternal child health programmes and included management of childhood illnesses during early stage

Steve Collins et al. (2006) found that on their research on management of severe acute malnutrition in children In community-based therapeutic care, all children with SAM without complications are handled as outpatients. This approach promises to be a successful and price-powerful remedy method.

Leonor Rodriguez et al. 2011 conducted the research on malnutrition and gastrointestinal and Respiratory infections in children the outcome of the research is that Acute gastrointestinal and respiratory infections are the maximum crucial causes of high morbidity and mortality among malnourished children and malnutrition is an critical associated element in those

deaths. The research defined inside this review offer proof that the combination of numerous defective immune mechanisms synergistically inhibits the improvement of an adequate host immune reaction.

Sheila Gahagan 2012 conducted the research on development of eating behaviour the outcome of this studies is complex biological, developmental, mental and social systems power the development and maintenance of eating behaviors. increasing understanding of every degree will inform prevention, intervention and treatment of eating related disorders.

Marie Claire Bartolo (2014) conducted the research on Nutrition in childhood and found that During early childhood kids begin to set up behavior for consuming healthy food and exercise that continue to be for their entire lives their threat for growing many continual illnesses could be substantially decreased. on the other hand, poor eating behavior and physical inactiveness for the duration of early life set the stage for health issues in adulthood.

Kashinath D Garkal and Anjali N Shete (2015)conducted the research on Influence of nutrition and socio-economic status on intellectual development in school children The observe concluded that the nutritional status and the socioeconomic status significantly decline the intellectual and physical boom of children.

Parul Christian et al.(2015) conducted the research on Nutrition and Maternal, Neonatal and Child Health discovered that there exists a strong link among nutrition and maternal, neonatal and child health ,MNCH desires greater focus on nutrition, taking a life-degree approach to integrate evidence based interventions in nutrients, fitness, and child development to boost up progress attention to adequate nutrition must begin within the prenatal degree but even in advance at some point of the preconception.

Yusuff Adebayo Adebisi et al.(2019)conducted the research on prevalence and socioeconomic impacts of malnutrition among children in Uganda the final results of this studies is Communal training mainly of ladies and young human beings is critical to improve nutritional status in the rural regions. additionally, there desires to be an improvement of the economic system of Uganda which would help to better nutritional status because of improved income and standard of living.

Natisha Dukhi (2020) conducted the study on Global prevalence of malnutrition the outcome of this research is this is vital as kids left untreated transition into malnourished maturity, increasing the healthcare costs and needs, weakening the healthcare structures, and perpetuating the vicious malnutrition cycle.

Smritikana Ghosh(2020)found that on her research on factors responsible for childhood malnutrition There are also many additional factors that may affect a child's nutrition level. In brief, socioeconomic determinants together with profits, ethnicity, geographical location, and intra-family parental and child level elements play a vital role in the nutritional status of children.

- **Problem to be investigated:-**

The proposed Ph.D. Research will examine ''the effectiveness of community based management of moderate acute malnutrition'' aged 6 months to 5 years both males and females child.early life malnutrition is a prime public health subject as it is associated with morbidity and mortality if proper management of MAM will be at early stage it will decrease the rate of malnutrition associated mortality and morbidity. this may additionally help us to know the key problem inside the fulfilment of community based management of moderate acute malnutrition.

- **Objective:-**

1. To study the impact of community based management programs on reducing the burden of severe acute malnutrition and associated complication.

2. To study the effectiveness of community based screening methods for identifying children with moderate acute malnutrition.

3. To study the nutritional status of children with moderate acute malnutrition after implementing community-based management programs.

- **Motivation –**

The major motivation behind choosing this topic is the prevalence of malnutrition in Gumla and lack of knowledge about the treatment.According to the NFHS-5 report of district Gumla 20.1% of children under 5 years are wasted (weight for height)and the children should be treated under a community-based model under the supplementary nutritional program at the Anganwadi centre. my idea is to know the efficiency of the community-based model and aware the population about the vulnerability of malnutrition and hence prevent them from being severely malnourished.

- **Research Questions –**

1. what are the rates of recovery, relapse, and persistence of moderate acute malnutrition among children following their participation in community-based management programs?

2. How do community-based management programs contribute to reducing the severity and duration of complications associated with severe acute malnutrition?

3. How does the quality and adequacy of foods provided through community based management programs influence the nutritional recovery and growth of children with moderate acute malnutrition?

4. what are the socio-economic, environmental and cultural factors that influence the nutritional status and recovery of children with moderate acute malnutrition post treatment?

- **Research Design and methodology:-**

a. Type of research- This research is exploratory research due to its flexible and open ended nature.

b. Data sources - For this study primary data as well as secondary data will be collected primary data will be collected from ICDS(Anganwadi centres) and MTC centre Sadar hospital Gumla, caregivers of children.

- **Tools and techniques of collecting data -**

The tools for the data collection are observation method and schedule method Schedules will be prepare with questions for the respondents.

- **Variables to be used for data collection –**

a. Dependent variables:- Health status, child feeding practices, stool disposal, Drinking water source, Hand washing, immunisation, Nutritional knowledge, stress, Albendazole, Vitamin A ,Iron supplementation.

b. Independent variables:- sex, Age, weight, Height, MUAC,WHZ z-score, Household size, education, Number of children, Income, Mother's work index.

- **Method of sampling:-**

- Area of research

  The area of present research would be limited to children those who are enrolled under the programme of Anganwadi Centre of Gumla block.

- Sample size and sampling Techniques

  Total 200 respondent will be selected through purposive sampling technique.

- Inclusion criteria:-
  a. male and female age 6 months to 5 years.
  b. weight for height between -2 and -3 z score.
  c. mid upper arm circumference between 115 mm and 125 mm.
- Exclusion criteria-

a. Children who are not enrolled under programme of Anganwadi centre.
b. Children with severe acute malnutrition.
c. Children under the age of 6 months and over the age of 5 years.

- **Data Analysis :-**

Analysis of collected data will be limit to mean difference range percentage of score. Data will also analysis with the help of graphic representation such as bar diagram pie chart as where necessary.

- **Significance of the study:-**

Moderate acute malnutrition is one of the fundamental problems inside the Gumla district of Jharkhand and it is associated with numerous diseases like infection, Tuberculosis, HIV ,pneumonia and many others. peoples are not privy to the consequences of malnutrition and take it very lightly, it is commonly affected in rural regions. Awareness is regarding there inadequate food consumption, illness,unhygienic practices and their diets are generally deficient in all crucial macro and micronutrients.

- **Relevance of the study to the present day problem:-**

It is very important to promote a healthy food environment and improve the availability of nutritious food. Children are important to the Nation present and its future thus it is extremely important to ensure good health for children. child health plays a crucial role in the development of a country India comprises nearly 13.1 percent of child population aged 0 to 6 years and it is very important to provide higher health care to them, nutritional status of the kids is the primary element in their common intellectual and physical development so in order to maintain good health one must practice good hygiene habits and consume healthy and balanced diet.

- **Contribution to the existing knowledge:-**

This proposed work will contribute to enhancing our understanding of the effectiveness of the community-based model which is important for the management of children with moderate acute malnutrition.

- **Future work:-**

we can further enhance our understanding of effective strategies for addressing moderate acute malnutrition in children at the community level and contribute to improving child health in future research.

- **Limitations :-**

1. The study will be limited to Anganwadi centres within gumla block only.
2. The study Will include the children who are enrolled under the Supplementary Nutrition Programme at the Anganwadi centre.
3. The study will not include children with severe acute malnutrition.

- **Tentative Chapterisation:-**

- Introduction
- Review of literature
- Materials and methods
- Results & Discussion
- Conclusions & Suggestions

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